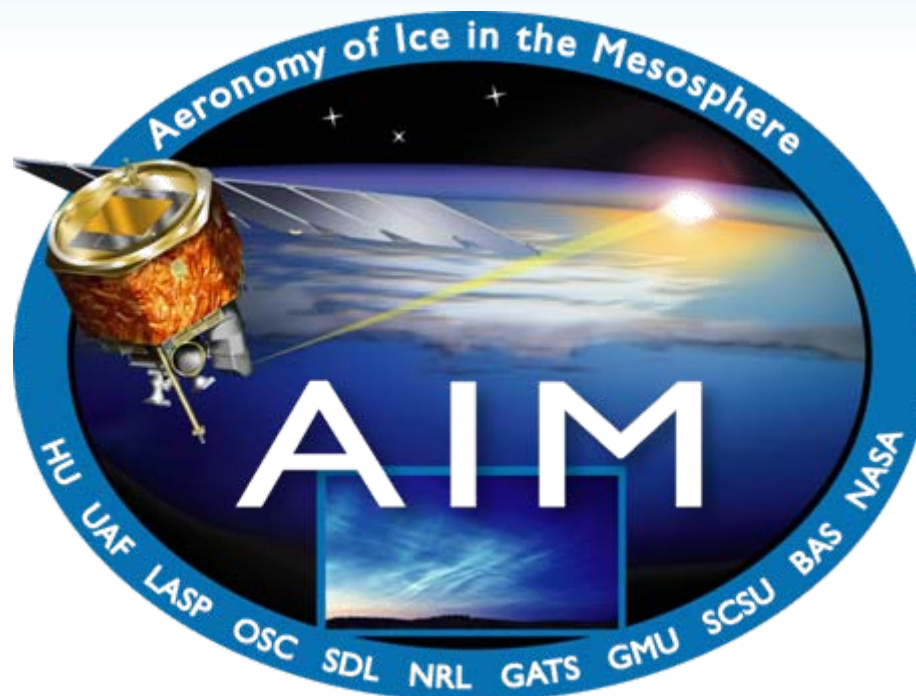




# Aeronomy of Ice in the Mesosphere (AIM)



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# Aeronomy of Ice in the Mesosphere (AIM)



Tom Eklund, July 28, 2001, Valkeakoski, Finland

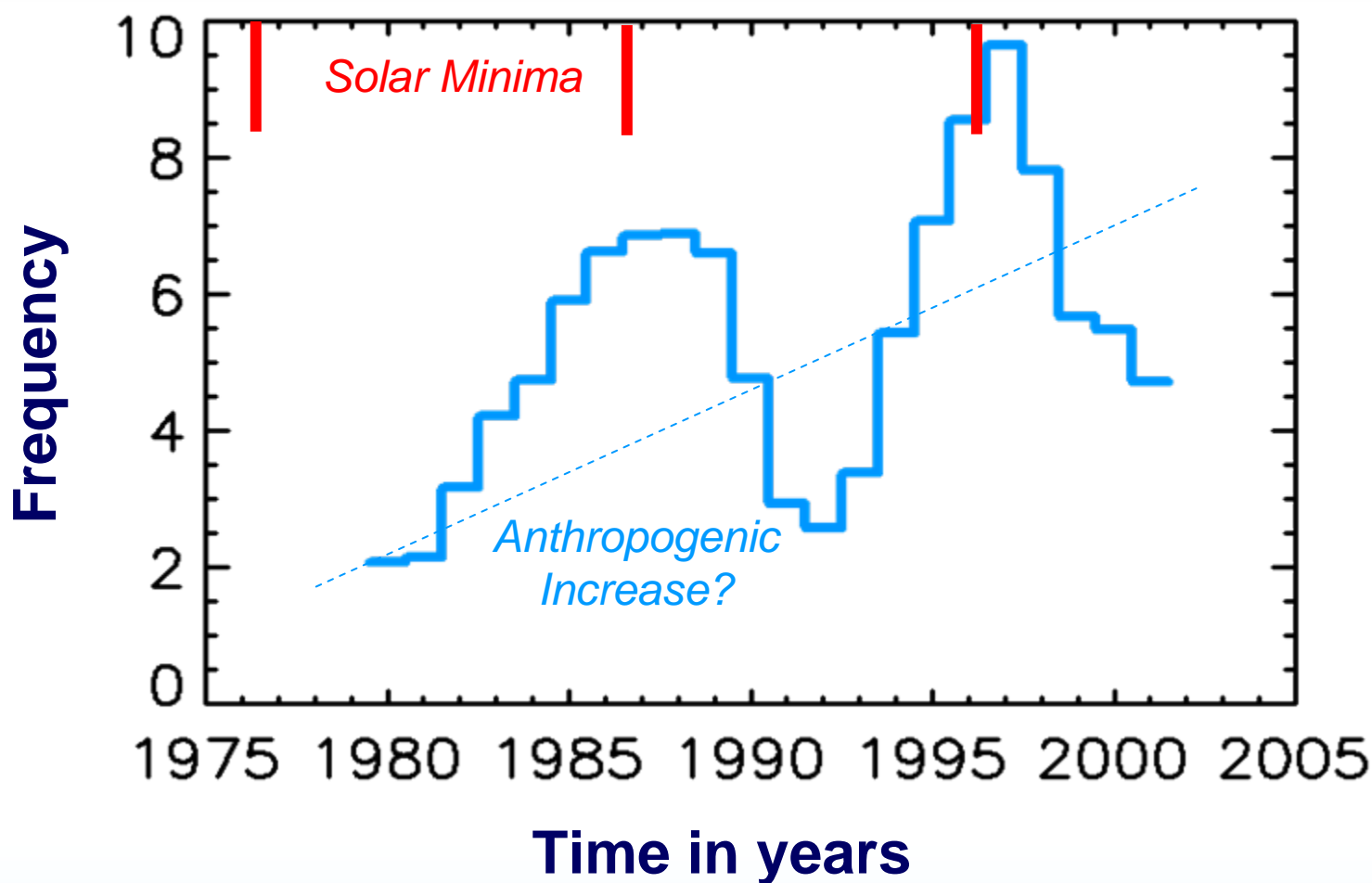
## Noctilucent Clouds Observed over Finland



LASP

*Orbital*









# NLCs are being observed at lower latitudes



**A spectacular but unexpected event: June 22, 1999!**



**A NLC is observed and photographed at 40° latitude for the first time!**  
by AIM Co-Investigator Dr. Michael Taylor



LASP

Orbital



GATS



# Aim is addressing key questions about NLCs

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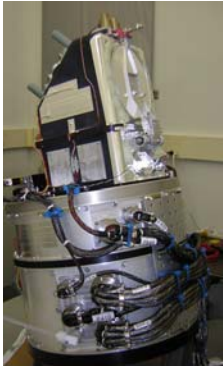
- **Why do they form?**
- **Why do they vary?**
- **Why have they appeared at such low latitudes (~ 40°N) in 3 recent NH summers?**
- **Is there a relationship to global change?**



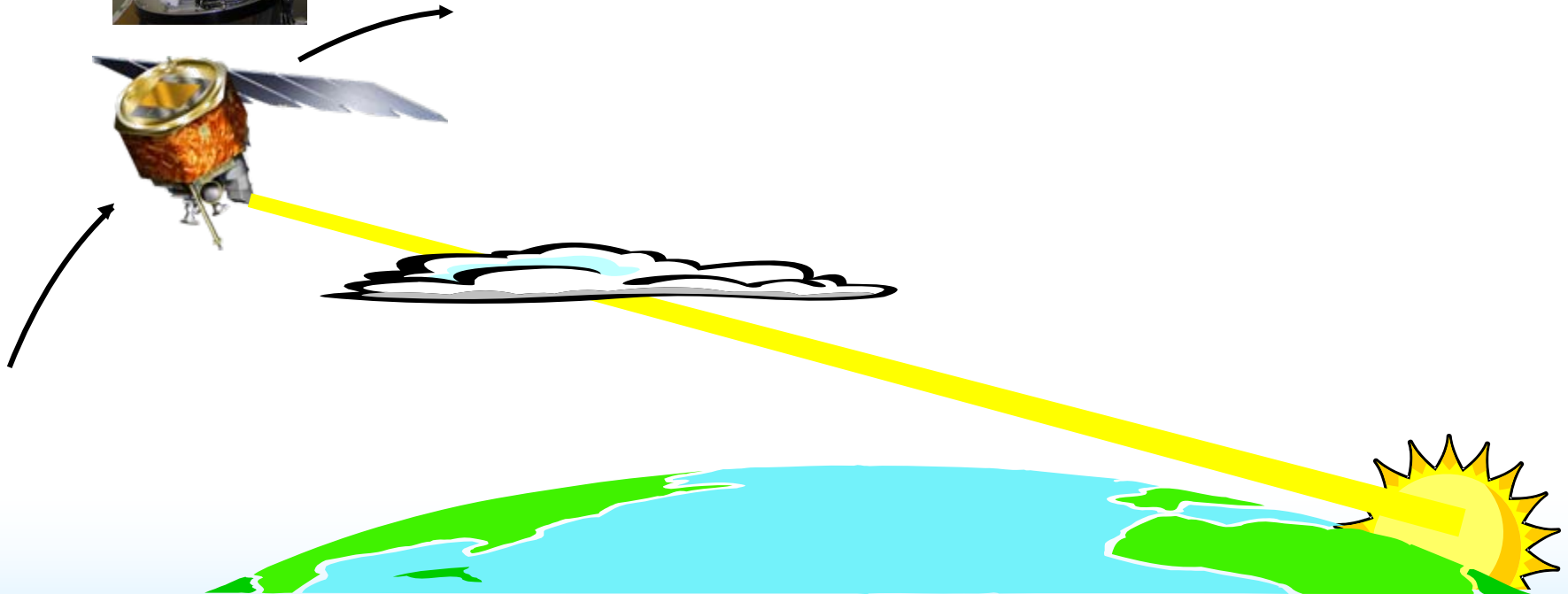


# AIM carries three instruments: SOFIE

## SOFIE



Ice, H<sub>2</sub>O, T, Chemistry, dust



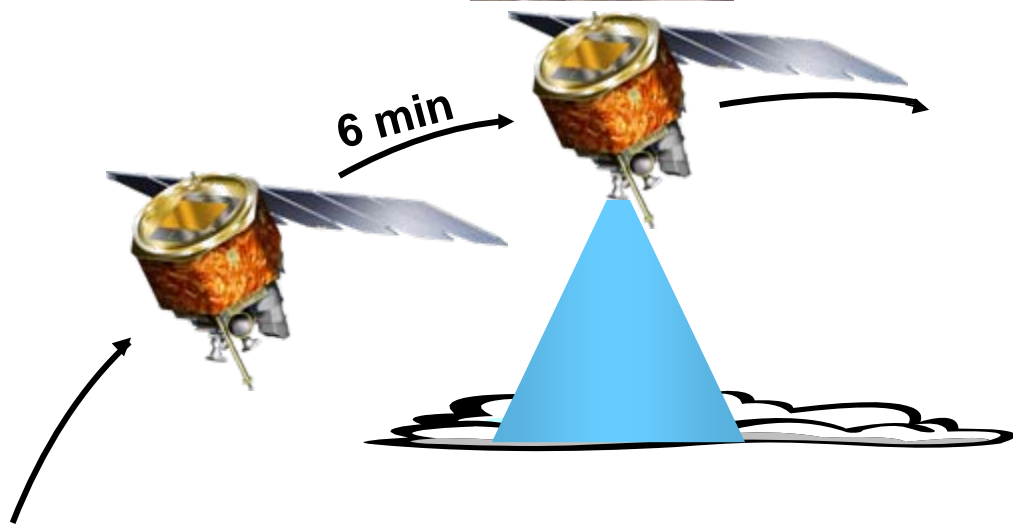


# AIM carries three instruments: SOFIE, CIPS

## CIPS



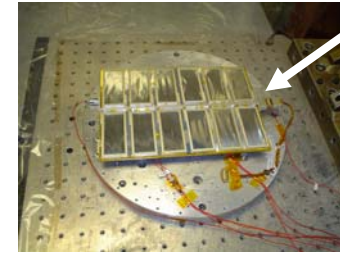
Ice images



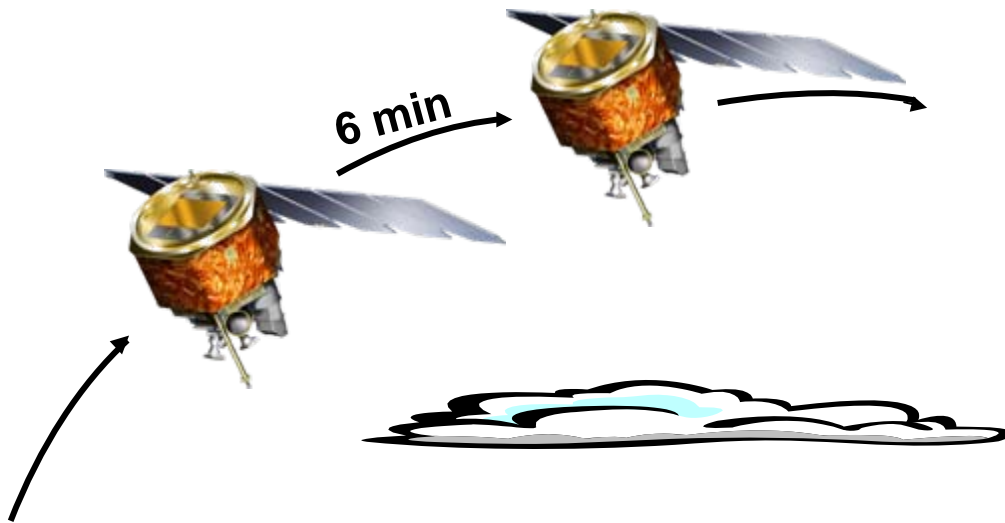


# AIM carries three instruments: SOFIE, CIPS, CDE

CDE



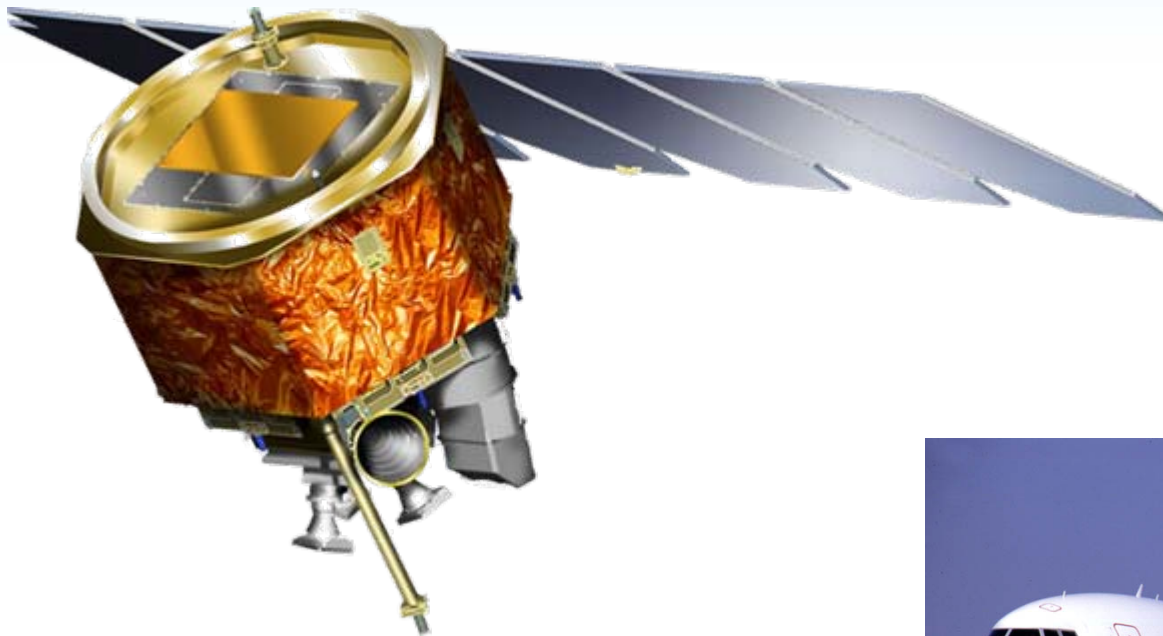
Cosmic  
Dust







# AIM launch is Fall 2006 on a Pegasus XL Rocket



- 600 km sun synchronous high noon orbit
- Two year mission

